

Thrust bearing lubricant measurement and balance

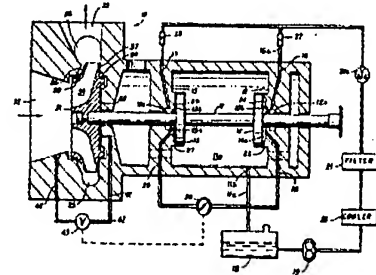
US3895689
Publication date: 1975-07-22
Inventor: SWEARINGEN JUDSON S (US)
Applicant: SWEARINGEN JUDSON S (US)
Classification:
- **International:** F01M1/18
- **European:** F01D25/16C2; F04D29/04C2; F16C17/04; F16C17/24; F16C32/06B; F16C32/06C5; G01L5/12
Application number: US19730395246 19730907
Priority number(s): US19700001130 19700107; US19730395246 19730907

DE 24 33 624
Best Available Copy

Report a data error here

US3895689

A method of determining the axial thrust on a thrust bearing assembly having a fixed and a rotating component in which a lubricant is being forced between the mated faces of the respective components and where zones of pressure are built up during operation, comprising monitoring the pressure of the lubricant between the mated faces. The invention also provides for determining the axial thrust by measuring the pressure differential of the lubricant between the mated faces or as it enters therebetween and as it emerges from between said faces. To measure the axial thrust on a pair of opposing thrust bearing assemblies, the pressure differential of the lubricant between the respective mated faces of the two assemblies is obtained. The axial thrust measurement can be utilized in a method of adjusting the axial thrust on the bearing assemblies by changing manually or automatically a balancing apparatus separate from the thrust bearings and their lubricant and used to adjust the net thrust on the bearings in response to the respective pressure measurement. The invention also encompasses the combination of suitable pressure measuring devices with thrust bearing assemblies with balancing apparatus to carry out the above measurement and control methods.



Data supplied from the esp@cenet database - Worldwide